tions as a support for the cylinder **10** and as a magnetic core for the attraction of a tracking element of the cursor control device. The pin **14** is made of brass or synthetic material, i.e., it should be of nonmagnetic material and is connected with the first iron core **12**. The first iron core **12** is thereby movably connected with the cylinder **10**.

[**0022**] The lower part consists of a pot-like element **18**, preferably made of alumina or synthetic material, carrying a felt ring **20** at its upper surface. The felt ring may be provided with an additional specific amount of rubber. At its inner lower surface **22** the pot-like element **18** is provided with a second iron core **24** fixedly connected thereto and having an opening **26** in the middle thereof. The pot-like element **18** is, in turn, provided with an opening which is arranged coaxially to the opening **26**, and a plate **28** is arranged at its outer bottom surface **30**.

[**0023**] The pin **14** is inserted into the opening **26** of the second iron core **24** and passed through the coaxially arranged opening in the bottom portion of the pot-like element **18**, where it is connected to the plate **28**.

[**0024**] Thus, the second iron core **24** is slidably arranged around the pin **14** so that it may move up and down along the pin **14**. The length of the pin **14** is dimensioned such that the distance between the lower surface of the first iron core **12** and the upper surface of the plate **28** is greater than the thickness of the second iron core **24**.

[**0025**] The tracking element **32**, having an iron shell, is arranged on top of the pot-like element **18** and is carried by the housing of the device (not shown), thereby not touching the pot-like element **18** in quiescent condition.

[**0026**] When the tracking element **32** is started to move slowly, the coil **16** will be energized.

[**0027**] The second iron core **24** is drawn up in the direction of the first iron core **12**. Since the pot-like element **18** is fixedly connected to the second iron core **24**, it will be drawn up as well. At the same time, the tracking element **32** is drawn in the direction of the second iron core **24**, thus bringing the apparatus in an activated state (**FIG. 2B**). The felt ring **20** will touch the surface of the tracking element **32** thus producing a braking effect on the tracking element.

[**0028**] The braking effect can be released by de-energizing the coil, e.g., by a mouse click or the like.

[**0029**] When accelerating the movement of the tracking element **32**, a point will be reached where a magnetic force will no longer exist. At this point, the second iron core **24** will no longer be attracted by the first iron core **12**, and the pot-like element **18** will return into its non-activated state (**FIG. 2A**). Accordingly, the braking effect will cease and the brake will be released.

[**0030**] Since the iron cores **12**, **24** have small dimensions, lying in the millimeter range, the pot-like element **18** can be adjusted to different sizes of tracking elements, i.e., smaller or greater pot-like elements **18** can be used. The ratio of dimensions between pot-like element and tracking element thereby is about 1:3.

[**0031**] Providing the felt ring **20** with an additional amount of rubber will increase its resisting force, but not the braking force. Using a "harder" brake covering, i.e., a mixture of felt and rubber, or cork or the like, will need to employ a pulsing brake mechanism. This will be described with respect to **FIG. 9** later.

[**0032**] **FIG. 3** schematically depicts a second embodiment of an apparatus according to the invention. In this embodiment, the tracking element **32** is held in a depression **34** present in the housing **36** of the device by means of ball bearings **38**. Within the housing **36**, a cylinder **40**, preferably made of synthetic material, is arranged below the tracking element **32**. Inside the cylinder **40**, there is mounted a coil **42**. The upper end of the cylinder **40** carries a mat **44** being comprised of a fleece, cork, rubber or the like, the lower end of the cylinder **40** has the form of a round plate **46** which will serve as a stopper, what will be described in more detail below. The coil **42** is inserted into a magnetic ring **48**, and a spring **50** is arranged between the ring **48** and the plate **46**. The magnetic ring **48** is secured to the housing **36** and the coil **42** rests on the bottom of the housing **36**.

[**0033**] When the tracking element **32** is started to move slowly, the coil **42** will be energized, the cylinder **40** will be moved in the direction of the tracking element **32** against the tension of the spring **50**. The mat **44** will be pressed against the tracking element **32** thus creating a braking effect. As has already been mentioned above, the round plate **46** will thereby act as a stopper, limiting the movement of the cylinder **40** by abutting to the magnetic ring **48**. As already discussed in view of the first embodiment, the braking force will cease when the tracking element is accelerated beyond a certain velocity where no magnetic force will be present any more. The cylinder **40** will, under the tension of spring **50**, return into its non-activated position.

[**0034**] **FIGS. 4A and 4B** show the apparatus according to the second embodiment in its non-activated and activated state.

[**0035**] In **FIGS. 5 and 6**, there are shown still other embodiments of the arrangement shown in **FIG. 3**. **FIG. 5** shows that three coils are arranged one beside the other on the side of the tracking element **32** being arranged within the depression **34**. The advantage of such an arrangement is that the tracking element **32** can project far beyond half of the housing **36**, without a risk that the tracking element **32** falls out of the depression when it is stopped. **FIG. 6** depicts four coils according to the one presented in **FIG. 3**, which are arranged around the tracking element **32** at an angle of 90°, respectively.

[**0036**] FIGS. **7** to **9** are graphs showing the braking effect relative to the speed of the tracking element for several embodiments of the invention.

[**0037**] When looking at **FIG. 7**, two different behaviors are shown. The upper curve I describes the case that the tracking element is moved very quickly. In this case no braking effect occurs since the coil will not be energized due to the quick movement of the tracking element.

[**0038**] However, in case the tracking element is moved slowly, the coil will be energized and the braking effect will occur after a slight delay (point B in **FIG. 7**). Due to the braking effect, the speed of the tracking element will decrease to a nearly constant value (curve II in **FIG. 7**). The braking effect will continue until it will be stopped by the user by releasing the brake with a mouse click or the like (point C in **FIG. 7**). The hatched part in **FIG. 7** illustrates the time the braking effect is present.

[**0039**] **FIG. 8** depicts a typical graph when drawing with the apparatus according to the invention. First, the tracking